"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

MAKAREVICH, V.N.; FREYNKMAN, M.G. [Freinkman, M.H.]

History of the geological development of the Yel'sk-Narovlya region in the Pripet graben. Vestsi AN BSSR. Ser. fiz.-tekh. nav. no.3:105-110 '62. (MIRA 18:3)

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S/133/60/000/012/010/015
A054/A027

AUTHORS: Matveyev, Yu.M., Candidate of Technical Sciences, and Freynkman, Z.Ye., Engineer

TITLE: Extrusion of Steel Tubing

PERIODICAL: Stal', 1960, No. 12, pp. 1122-1126

TEXT: In recent years the method of producing tubes by extrusion has become more widely used abroad. Extruding tubes from stainless heat resistant and other steels is known to have several advantages: tubes can be extruded from steels with a low plasticity, the tube surfaces (both internal and external) are not damaged, various profiles can be manufactured, the process can be adjusted to producing tubes of various diameter, etc. By reference to studies of several American, German, French, Swedish and Italian vertical presses and horizontal hydraulic presses, in the GIPROMEZ plans for tube extruding shops have been made and the technology of this production method established. These shops consist of two production lines, the first with a 1,600-ton horizontal hydraulic press, the other with a 3,150-ton press of similar type for producing tubes and tubular elements from stainless heat resistant high alloy steels and alloys of various types for the engineering, chemical and

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other industries. These shops extrude tubing and tubular profiles 38-150 mm in diameter, 4-9 m long, with a wallthickness of 2.5-8 mm. The annual output is planned for 33,000 tons. The tube blanks with internal diameters under 50 mm are manufactured by boring or broaching from rolled rods, 2-7 m long, 100-270 mm in diameter, cut into 400-700 mm long pieces. The billets are either fed into the horizontal boring machines for boring holes or immediately on the shelves of the induction furnace (Fig. 1). Depending on the metal the billets are made of, they are induction heated to 1,050-1,250°C, then pushed out of the furnace onto a conveyor taking them to the broaching presses. Before arriving in the container of the broaching press, the billet is coated by glass and after broaching it is formed into a tube blank (Fig. 2) and transported to a bath of molten barium chloride. In the bath the tube blanks are reheated to the extrusion temperature (1,050-1,250°C) depending on the type of steel. By this treatment the surface of the tube blank is cleaned from the scale formed during the first heat treatment, broaching and transport. In the following stages scale forming on the tube surface is prevented by the barium chloride coating. After removal from the bath the tube blank is put on a track which is coated with glass powder or fiber. By rolling along this slope the hot tube blank is also coated with glass. Glass powder is scattered inside the tube

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blank which coates the internal surface during rolling. If no glass powder is put in the tube, the internal surface is coated by a textile-glass hose pulled over the mandrel to be pushed into the tube blank. Between the mandrel and the die of the extruder a gap is formed, through which the tube blank is pushed. The operation of the extruder is represented in Figs. 3 and 4. Tube blanks bored on a horizontal boring machine are induction heated to 650-850°C and immediately put into the salt bath for heating to the extrusion temperature. After extrusion the tube is cut off from the butt remaining in the container; it is cut by a saw to a length of 4-9 m. After the saw there is the hardening bath for the heat treatment of austenite steel tubes, the chamber for delayed cooling of martensite steel tubes or cooling equipment for tubes made of other high-alloy and carbon steels, (perlite-ferrite types) and alloys which have to be self-cooled. After edge-cutting the stainless steel tubes are put in the pickling bath. Tubes made of steel for which heat treatment is required after cooling are carried to the respective shops for tempering, normalization or hardening, as required. After heat-treatment the tubes are straightened and then put in the pickling bath. By extrusion it is possible to manufacture carbon steel tubes with intricate continuous sections which cannot be produced by rolling. There are 4 figures and 2 tables.

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SO: Izvestiya Ak. Nauk Latviyskoy. SSR. No. 9, Sept., 1955

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MIKHAILOV, P.M.; FREYSHTADT, L.G.

Types of driers for flax and hemp mills. Tekst.prom. 16 no.9:46-47 S '56. (MLRA 9:12)

(Drying apparatus) (Fibers)

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FRYTAG, A.A., inzh.

Methodology for conducting electrical measurements in mines under gas and coal dust explosion-hazard conditions. Izv. vys. ucheb. zav.; energ. 4 no.11:52-56 N '61. (MIRA 14:12)

1. Vsesoyuznyy zaochnyy energeticheskiy institut. Predstavlena kafedroy teoreticheskikh osnov elektrotekhniki.
(Mines and mineral resources--Electric measurements)
(Electricity in mining--Safety measures)

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(Coal mines and mining) (Electric power)

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Industrial hygiene and condition of health of workers exposed to calcium cyanamide. Med. pracy 4 no.5:363-370 1953. (CIML 25:5)

1. Of the Institute Industrial Agricultural Medicine (Head--Prof. J. Parnas, M.D.) Lublin.

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Investigation on the effect of vibrations on health in tractor workers. Ann.Univ.Lublin;sec.D 8:335-354 1953.

1. Z Instytutu Medycyny Pracy Wsi A.M.w Lublinie. Dyrektor; Prof. dr. Jozef Parnas.; Z Centralnego Instytutu Ochrony Pracy w Warszawie Dyrektor: inz. L. Taniewski.

(OCCUPATIONAL DISEASES,
in tractor workers, caused by vibrations)
(VIBRATIONS, injurious effects,
in tractor workers)

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FREYTAG, J., dr

Work hygiene of tractor workers. Zdrowie pub., Warsz. no.5:403-405 Sept-Oct 54.

1. Instytut Medycyny Pracy Wsi w Lublinie.
(OCCUPATIONAL DISEASES,
farm tractor workers)

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1. Instytut Medycyny Pracy Wsi w Lublinie, ul. Ogrodowa 4.
(INDUSTRIAL HYGIENE, in Poland)

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FREYTAG J.

Excerpta Medica Sec 6 Internal Medicine Vol. 9/6 June 55

4029. FREYTAG J. and PUZYNA C. Inst. med. Pracy Wsi A. M., Lublin; Centr. Inst. [redacted] Pracy, Warszaw. *Z badań nad wpływem wstrząsów na stan zdrowia traktorzystów. First investigations on the influence of vibrations on the state of health of tractor drivers ANN. UNIV. LUBLIN, SECT. D 1954, 8/1953 (335-354) Graphs 5 Tables 1

In the work of the tractor driver the influence of mechanical vibrations from the engine and from the driving on the road is constant. These vibrations cause disturbances in the vegetative system, especially vasomotor disturbances. The clinical picture is classified as a peripheral neurovegetative syndrome.

Visser - Amsterdam (VI, 17)

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1

Excerpta Medica Sec 17 Public Health Vol. 1/6 June 55

2403. FREYTAG J. Inst. med. Pracy Wsi A. M. v Lublinie. * Stan zdrowia traktorzystow w P. G. R. i P. O. M. -ach w świetle analizy statystycznej ankiet. Statistical analysis of questionnaires concerning the state of health of tractor-drivers in state-owned farms ANN. UNIV. LUBLIN., SECT. D 1954, 8/19 (355-360) Tables 4

A questionnaire to 2,265 tractor-drivers revealed that 36% of all questioned had some complaints. Forty-eight of them connected these with their work (percentage increasing with the number of years doing this kind of work). Localization of the symptoms in gastrointestinal tract, sacroiliac region and upper extremities. Also headache, nausea and vomiting.

Visser - Amsterdam (VI, 17)

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Med.pracy 6 no.3:187-190 1955.

1. Z Zakladu Hiegieny Pracy Mechanizatorow Rolnictwa Institutu Medycyny Pracy Wsi w Lublinie Dyrektor: prof. dr J. Parnas.
(INDUSTRIAL HYGIENE,
in train. of tractor operators in Poland)

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"Chrońmy się przed wypadkami w pracy rolnej" (Let's protect against accidents in agricultural work), by J. Freytag, T. Jacyna-Onyszkiewicz. Reported in New Books (Nowe Ksiazki), No. 14, July 15, 1955

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FREYTAG, Jozef: PLESZCZYNSKI, Waclaw

Research on the absenteeism due to illness among workers of the state-owned farms in Poland. Ann.Univ.Lublin; sec.D 14:157-172 '59.

1. Z Instytutu Medycyny Pracy i Higieny Wsi Dyrektor; prof. dr Jozef Parnas. Zaklad Hygieny Pracy Mechanizatorow Rolnictwa Kierownik: doc. kand. nauk med. dr Jozef Freytag.
(AGRICULTURE)
(OCCUPATIONAL DISEASES statist)

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FREYTAG, M.E.

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1. Ustav zakladni agrotechniky a pestovani rostlin, Munchenberg-Mark.

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SOKOLOWSKI, Stefan; FREYTAG, Tadeusz; KMITA, Stanislaw

Experiments with bacteriostatic activity of self-polymerizing acrylic implants. Neur. &c.polska 5 no.3:253-258 My-Je '55.

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(ACRYLIC RESINS
self-polymerizing implants, bacteriostatic eff.)

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FRETTAG, Tadeusz; KMITA, Stanislaw; SOKOLOWSKI, Stefan

Application of the plastic substance dentacril as tissue implants. Polski przegl.chir. 27 no.4:323-326 Apr '55.

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(ACRYLIC RESINS
implants in dogs, histol.eff.)

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KMITA, Stanislaw; SOKOLOWSKI, Stefan; FREYTAG, Tadeusz

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1. Z Wojskowego Szpitala Klinicznego w Lodzi, Lodz, Wierzbowa 33/36.

(ACRYLIC RESINS,
self-polymerizing, heat prod. in prep. for implants. (Pol))

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

SOKOLOWSKI, Stefan; FREYTAG, Tadeusz

Experience with a technic of methyl polymetracrylan implants in cranioplasty. Neur. Ac. polska 7 no.1:123-135 Jan-Feb 57.

1. Z Oddziału Neurochirurgii Centralnego Wojskowego Szpitala Klinicznego Ordynator: dr med. S. Sokolowski. i z Pododdziału Chirurgii Szczękowej Centralnego Wojskowego Szpitala Klinicznego Kierownik: dr T. Freytag. Adres: Lodz, Wierzbowa 33/36.

(CRANIUM, surgery,
acrylic implants (Pol))
(ACRYLATES, cranioplasty (Pol))

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SEGAL, Pawel; FREYTAG, Tadeusz; CZECHOWSKA, Zofia

Investigations on plastic material in experimental scleral wounds in rabbits. Klin. oczna 27 no.1:9-13 1957.

1. Z Oddzialu Ocznego C.W.S. Klinicznego. Ordynator: doc. dr. P. Segal. Z Pododdzialu Chirurgii Szczekowej C.W.S. Klinicznego. Kierownik: dr. T. Freytag Z Zakladu Anatomii Patologicznej A.M. w Warszawie. Kierownik: prof. dr. L. Paszkiewicz. Warszawa 12, ul J. Dabrowskiego 77, m. 27.

(SCLERA, wounds & inj.
exper., use of plastic material in reconstruction & healing of rabbit eye (Pol))
(PLASTICS
use in reconstruction & healing of rabbit eye following exper. scleral wds. (Pol))

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SEGAL, Pawel; FREYTAG, Tadeusz; SOKOLOWSKI, Stefan

Use of rapid polymerizing acryl masses in orbital surgery.
Klin. oczna 27 no.2:143-156 1957.

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Z Pododdzialu Chirurgii Szczekowej C.W.S.K. Kierownik: dr.
T. Freytag i z Oddzialu Neurochirurgii C.W.S.K. Ordynator: dr.
med. S. Sokolowski. Warszawa 12, ul. J. Dabrowskiego 77 m. 27.
(ORBIT, surg.
plastic, use of rapid polymerizing acryl mass (Pol))
(ACRYLIC RESINS
rapid polymerizing acryl mass, use in orbital surg. (Pol))

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SEGAL, Pawel; FREYTAG, Tadeusz; WANIEWSKI, Edward

The problem of rare neoplasms arising from the ciliary part of the retina (diktyoma). Klin. oczna 35 no.1:63-69 '65.

1. Z Kliniki Chorob Oczu (Kierownik: prof. dr. med. P. Segal); z Kliniki Laryngologicznej (Kierownik: prof. dr. med. J.Borsuk); oraz z Zakladu Anatomii Patologicznej Wojskowej Akademii Medycznej w Lodzi (Kierownik: prof. dr. med. A. Pruszczynski).

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

ACC NR: AP6028577 (N) SOURCE CODE: UR/0314/66/000/008/0011/0013

AUTHOR: Belevtsev, B. A. (Engineer); Freytag, V. A. (Candidate of technical sciences)

ORG: None

TITLE: Stationary seals at high pressures

SOURCE: Khimicheskoye i neftyanoye mashinostroyeniye, no. 8, 1966, 11-13

TOPIC TAGS: sealing device, hermetic seal, high pressure

ABSTRACT: The authors describe the basic operating principles of two types of seals used at the Leningrad Scientific Research Institute of Chemical Machinery in hydraulic tests and recommend various modifications for improving seal design. The two types of seals are shown in figures 1 and 2. The viscoelastic type may be used for testing thick-walled cylinders at an internal pressure of up to 6000 atm. The viscoelastic sealing elements are made from various

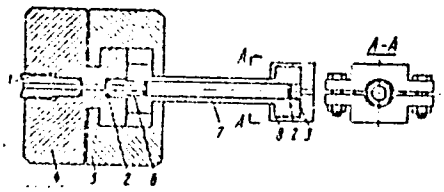

Figure 1. Viscoelastic seal for testing thick-walled cylinders: 1--sleeve; 2--viscoelastic elements; 3--blind stopper; 4--booster head; 5 and 8--yokes with collars; 6--transfer mandrel; 7--thick-walled cylinder.

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materials depending on the operating conditions. The operation of the seal is explained by treating the viscoelastic material as a viscous liquid. The material is forced into the clearance extremely slowly due to its high viscosity. On the other hand, if the gap is so small that the friction of the flowing viscoelastic material against the wall of the gap balances the pressure of the medium, the material will not be forced into the gap at all. This type of seal works equally well under liquid and gas pressures. Elastoplastic seals (see figure 2) are a combination of a corrugated liner and a viscoelastic seal. The annular mandrel in this type of seal is made from soft steel. As the internal pressure increases this mandrel is subjected to radial deformation. Expansion of the mandrel under the effect of internal pressure continues until the projections on the outer surface of the mandrel touch the inner surface of the components being sealed. When the internal pressure is reduced or released, radial deformation of the ring keeps the seal airtight. Suggestions are made for improving the reliability and durability of both types of seals. Orig. art. has: 5 figures.

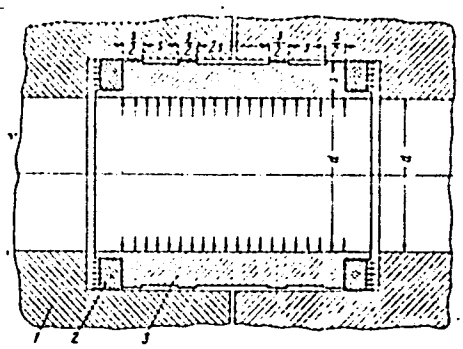

Figure 2. Elastoplastic seal: 1--components being sealed; 2--rings made of viscoelastic material; 3--annular mandrel

SUB CODE: 13/ SUBM DATE: None

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

BELYVTSEV, B.A.; FREYTAG, V.A.

Experimental study of thick-walled cylinders under tension.
Sbor. st. NIIKHIIMMASH no.21:21-32 '58. (MIRA 11:7)
(Cylinders—Testing)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

BELEVTSEV, B.A.; FREYTAG, V.A.

Perfecting the method of measuring the deformation of bodies of high-pressure apparatuses by means of wire resistance strain gauges. Sbor. st. NIIKHIIMMASH no.21:54-64 '58. (MIRA 11:7)
(Deformations (Mechanics)) (Metals--Testing)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

S/184/63/000/002/002/007
A059/A126

AUTHOR: Freytag, V.A., Engineer

TITLE: Study of the carrying capacity of thick-walled cylinders with regard to the influence of the metal structure

PERIODICAL: Khimicheskoye mashinostroyeniye, no. 2, 1963, 20 - 27

TEXT: The problem of high plastic deformation of thick-walled cylinders exposed to internal hydrostatic pressure was theoretically solved on the basis of the deformation theory of plasticity and of a study of 164 samples of plastic metals. The rate $\overline{\sigma}$ of stresses was found to be related to the rate $\overline{\varepsilon}$ of deformations by the functional dependence

$$\overline{\sigma} = \overline{\sigma}_{max} \left(\frac{\overline{\varepsilon}}{a + \overline{\varepsilon}} \right)^m \qquad (9)$$

in an attempt to obtain an accurate solution of the problem. The equation

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$$m = \frac{\ln \frac{\alpha_0^2}{\alpha^2}}{\ln\left(1 + \frac{a\sqrt{3}}{\ln \frac{\alpha_0^2 - 1}{\alpha^2 - 1} - \ln \frac{\alpha_0^2}{\alpha^2}}\right) - \ln\left(1 + \frac{a\sqrt{3}}{\ln \frac{\alpha_0^2 - 1}{\alpha^2 - 1}}\right)}; \qquad (25)$$

where $\alpha = \frac{r_2}{r_1} = \frac{\rho_2}{\rho_1}$ is the ratio of the radii (diameters) of the strained cylinder, and the ratio between the initial and final ratios of the radii (diameters) is

$$\alpha = \alpha_0 e^{-(\bar{\varepsilon}_1 - \bar{\varepsilon}_2) \cdot \frac{\sqrt{3}}{2}}.$$

From α which is calculated from (25), the internal deformation

$$\bar{\varepsilon}_1 = \frac{1}{\sqrt{3}} \cdot \ln \frac{\alpha_0^2 - 1}{\alpha^2 - 1}$$

and the external deformation

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$$\bar{\varepsilon}_2 = \bar{\varepsilon}_1 - \frac{1}{\sqrt{3}} \cdot \ln \frac{\alpha_0^2}{\alpha^2}$$

can be easily found. The mean square deviation of results calculated by this method from the experimental ones is ±4%. The approximate solution is

$$\ln \frac{\alpha + 1}{\alpha - 1} = \ln \frac{\alpha_0 + 1}{\alpha_0 - 1} + \frac{a\sqrt{3}}{2} \cdot \left(\sqrt{1 + \frac{8m}{a\sqrt{3}} \cdot \frac{\alpha \ln \alpha}{\alpha^2 - 1}} - 1 \right), \qquad (33)$$

which is equivalent to equation (25). The coefficient of resistance is calculated from the equation

$$\varkappa = \frac{2}{(\sqrt{3})^{m+1}} e^{\bar{\varepsilon}_v} \left(\frac{2\alpha \ln \alpha}{\alpha^2 - 1} \right)^m \cdot \left(\frac{1 + \sqrt{1 + \frac{4m}{a}}}{1 + \sqrt{1 + \frac{8m}{a\sqrt{3}} \cdot \frac{\alpha \ln \alpha}{\alpha^2 - 1}}} \right)^{2m} \frac{\ln \alpha}{\ln \alpha_0}, \qquad (37)$$

where $\bar{\varepsilon}_v$ is the logarithmic longitudinal tensile deformation at the moment of reaching the conventional tensile strength σ_v. For practical purposes, the simplified equation

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$$\varkappa = \frac{2}{(\sqrt{3})^{\bar{\varepsilon}_v+1}} \left(e \frac{2\alpha \ln \alpha}{\alpha^2 - 1} \right)^{\bar{\varepsilon}_v} \frac{\ln \alpha}{\ln \alpha_0} \qquad (38)$$

can be used for cylinders with $\alpha_0 > 1.5$. The final ratio of diameters has to be calculated in this case from

$$\alpha = \frac{1 + \frac{\alpha_0 - 1}{\alpha_0 + 1} \cdot e^{-\bar{\varepsilon}_v}}{1 - \frac{\alpha_0 - 1}{\alpha_0 + 1} \cdot e^{-\bar{\varepsilon}_v}}, \qquad (39)$$

from which α can be determined without having to use the method of successive approximations. The test results obtained by the Leningrad Branch of the NIIKhIMMASh for $\varkappa$ show that, if $1 \leqslant \alpha_0 \leqslant 3$ and $\alpha_0 \to 1$,

$$\varkappa = \frac{2}{(\sqrt{3})^{\bar{\varepsilon}_v+1}}, \qquad (40)$$

which yields satisfactory results as compared with the experimental ones except with cylinders made of the austenitic steel X18 H12 M3 T (Kh18N12M3T) and tem-

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Study of the carrying capacity of ....

pered copper, where the difference between the calculated and experimental results is considerably greater than ±4%. Another formula appropriate for the calculation of the coefficient of resistance is

$$\varkappa = 1.15 - 0.56\ \bar{\varepsilon}_v \cdot \qquad (41)$$

Thus, the engineering calculation of thick-walled cylinders has to be performed from

$$p = \varkappa\,[\sigma] \ln \frac{D_e}{D}\ , \qquad (42)$$

where p is the working pressure, $\varkappa$ the coefficient of resistance calculated for $\alpha_0 \leqslant 3$ from (41) and for $\alpha_0 > 3$ from (38) and (39); $[\sigma] = \frac{\sigma_v}{n_v}$ is the permissible stress conforming to the tensile strength, and D_e and D are the external and internal diameters of the cylinder, respectively. For the thickness of the wall of a thick-walled cylinder,

$$s = \frac{D}{2}\left(e^{\frac{p}{\varkappa[\sigma]}} - 1\right), \qquad (43)$$

or

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Study of the carrying capacity of ....

$$s = \frac{D}{2}\left(10^{\frac{p}{2,3\varkappa[\sigma]}} - 1\right), \qquad (44)$$

whereas, for cylinders with $\alpha_0 \leqslant 1.5$,

$$p = 2\varkappa[\sigma] \cdot \frac{D_n - D}{D_n + D}, \quad \text{and} \quad s = \frac{pD}{2\varkappa[\sigma] - p}.$$

In the case when $\alpha_0 \leqslant 3$, thick-walled cylinders can be calculated from

$$p = [\sigma] \ln \frac{D_n}{D}; \qquad s = \frac{D}{2}\left(10^{\frac{p}{2,3[\sigma]}} - 1\right), \qquad (45)$$

if the uniform plastic deformation is unknown. There are 13 figures and 3 tables.

Card 6/6

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

L 3545-66 EWT(m)/EPF(c)/T DJ
ACCESSION NR: AP5024424 UR/0286/65/000/015/0128/0128

AUTHORS: Belevtsev, B. A.; Freytag, V. A.

TITLE: A self-sealing device. Class 47, No. 173552

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 128

TOPIC TAGS: hermetic seal, sealing device

ABSTRACT: This Author Certificate presents a self-sealing device containing rings of elastic material, mounted on an elastic metallic mandrel (see Fig. 1 on the Enclosure). To improve the seal at high pressures and to make the rings operate in conjunction with a lenticular and a packing gasket, the elastic metallic mandrel of the device is made in the form of a collar with external annular bolts. The elastic rings are mounted on the terminal recesses of the mandrel. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 13Jan62 ENCL: 01 SUB CODE: IE

NO REF SOV: 000 OTHER: 000

Card 1/2

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

L 3545-66
ACCESSION NR: AP5024424

ENCLOSURE: 01

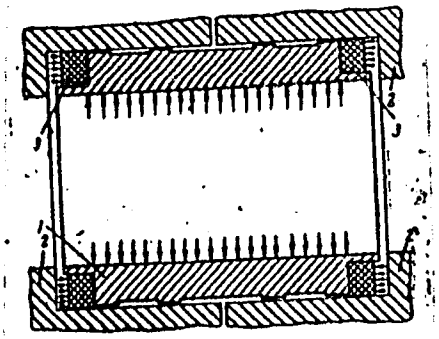

Fig. 1. 1- metallic mandrel; 2- external annular belts; 3- rings

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYTSES, V.N.

AID P - 2416

Subject : USSR/Electricity

Card 1/1 Pub. 26 - 15/33

Author : Freytses, V. N., Eng.

Title : Welding of a crack in the drum of a high-pressure boiler

Periodical : Elek sta 5, 46-47, My 1955

Abstract : A very detailed description of the welding process used to repair the drum of a high-pressure boiler is given. Three diagrams.

Institution: None

Submitted : No date

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

SOV/119-58-1o-1/19

AUTHORS: Freytsis, I. D., Engineer, Sherstoboyev, M.N., Engineer

TITLE: Automatic Station for a Many-Point Temperature Control (Avtomaticheskaya stantsiya mnogotochechnogo regulirovaniya temperatury)

PERIODICAL: Priborostroyeniye, 1958, Nr 1o, pp 1-5 (USSR)

ABSTRACT: The following works where automatic temperature control is used are mentioned **(works located in Leningrad):**

"Elektrosila" factory imeni Kirov	with 48 transmitters
Radioworks imeni "Kozitskiy"	with 72 transmitters
Plastics factory imeni "Komsomol'skaya pravda"	with 300 transmitters
Shoe factory "Skorokhod"	with 12o transmitters.

The plant at the "Skorokhod" is a telemechanical apparatus with valve controlled elements; it performs the following operations:

1) Temperature control of a maximum of 150 transmitters.
2) Automatic temperature control: In the case of cooling as well as in the case of an overheating the place of deviation

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Automatic Station for a Many-Point Temperature Control

must be located by signals.
3) Automatic control and signalling from all transmitters.
4) Optional temperature measurement operated by telephone dialling to any automatic transmitter station.
5) Graphical representation of the temperature for any transmitter at any time.
6) Pre-set control of temperature as a function of time for any object by means of a special supplementary apparatus.

The electrical block scheme of the station can be divided into the following sections:
a) Scanning device.
b) Measurement scheme with valve amplifier and control unit.
c) Automatic control.
d) Desk for remote measurement and recording of temperature.
e) Pre-set control.

The electric circuit diagram of the scanning device and that of the measuring scheme of the station are given. The way of operation of their individual parts is partly described. The desk for remote control, the control blocks and the commutators are shown by photographs. It turned out that the plant needs a minimum of service. The works electrician is employed at several stations for operating such a unit.

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

Automatic Station for a Many-Point Temperature Control

One pickup transmitter costs about 300 Roubles. The employment of a 72-transmitter station in the "Kauchuk" factory saved 100 000 Roubles in one year. There are 5 figures.

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYTSIS, Iosif Davidovich; GLUSKIN, I.Ya., inzh., retsenzent; KNAKHOVSKAYA, L.M., red.

[Centralized temperature regulation and control systems in manufacturing rubber and plastic articles] Tsentralizovannye sistemy regulirovaniia i kontrolia temperatury pri proizvodstve izdelii iz reziny i plasticheskikh mass. Moskva, Izd-vo "Legkaia industriia," 1964. 121 p. (MIRA 17:5)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYVALD, R.

Complexity of the recognition of symmetry in Turing machines with data inlet. Alg. i log. 4 no.1:47-58 '65.

(MIRA 18:5)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREY'VALD, V.

Buildings, Prefabricated

Sectional movable garage-shop for tractors KT-12. Les. prom. 11, No. 7, 1951.

9. Monthly List of Russian Accessions, Library of Congress, December, 1952 1953X Unclassified.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

S/058/61/000/007/036/086
A001/A101

AUTHORS: Fedorov, V.A., Freyvert, S.I.

TITLE: Double-beam photoelectric fluorometer for quantitative determination of uranium

PERIODICAL: Referativnyy zhurnal, Fizika, no. 7, 1961, 170, abstract 7093 (V sb. "Metody lyuminestsentn. analiza". Minsk, AN BRRS, 1960, 27 - 31)

TEXT: The authors describe the design of a fluorometer for determination of small quantities of uranium using the fluorescence of beads made of sodium fluoride or carbonate-fluoride mixture. Measurements are performed by the zero method by comparing fluorescence intensities of the specimen tested and a glass standard using optical compensation. Determinable uranium concentration amounts to 10^{-8} -10^{-5}%, the efficiency of the instrument is 60 analyses per hour.

Yu. Mazurenko

[Abstracter's note: Complete translation]

Card 1/1

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYMONT, S.I.

PHASE I BOOK EXPLOITATION SOV/4973

Soveshchaniye po lyuminestsentsii, 8th, 1959

Metody lyuminestsentnogo analiza; materialy soveshchaniya (Methods for Luminescence Analysis; Materials of the 8th Conference) Minsk, Izd-vo AN BSSR, 1960. 147 p. 1,000 copies printed.

Sponsoring Agency: Akademiya nauk Belorusskoy SSR. Institut fiziki.

General Ed.: N. A. Borisevich; Ed.: L. Timofeyev; Tech. Ed.: N. Siderko.

PURPOSE: This collection of articles is intended for chemists and physicists interested in molecular luminescence, and for scientific personnel concerned with applications of this and related phenomena in research in the life sciences.

COVERAGE: The collection contains 28 papers read at the Eighth Conference on Luminescence, which took place 19-24 October, 1959 [place of conference not given]. These studies are concerned principally with the development of new luminescence methods for quantitative

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APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

and qualitative chemical analysis, and with the applications of luminescence in medical and biological research. They discuss luminescence methods for the determination of uranium, mercury, magnesium, aluminum, boron, and other elements, as well as luminescence methods for the diagnosis of skin cancer and the detection of grippe virus, pathogenic microorganisms, etc. The structural design of new instruments for luminescence analysis is described. The conference was not concerned with studies on the phosphorescence of crystal phosphores. There is a discussion of the contributions of Soviet specialists in molecular luminescence in the course of the year and a half preceding the conference. The articles of V. K. Matveyev (p. 75) and of V. V. Patrikeyev (p. 79) have been annotated because of their importance. No personalities are mentioned. References accompany most of the articles.

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Levshin, V. L. Opening Address 3

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

Konstantinova-Shlezinger, M. A. Luminescence Analysis and the Course of its Development 8

Fedorov, V. A., and S. T. Freyvert [Gosudarstvennyy opticheskiy institut imeni S. I. Vavilova (State Optical Institute imeni S. I. Vavilov)]. Two-Beam Photoelectric Fluorometer for the Quantitative Determination of Uranium 27

Stolyarov, K. P., and N. N. Grigor'yev [Leningradskiy gosudarstvennyy universitet imeni A. A. Zhdanova (Leningrad State University imeni A. A. Zhdanov)]. Qualitative and Quantitative Luminescence Analysis of Inorganic Ions 32

Shcherbov, D. P., R. N. Korzheva, and A. I. Ponomarenko [Kazakhskiy institut mineral'nogo syr'ya (Kazakh Institute of Mineral Raw Materials)]. Determination of Boron with Benzoin with the Aid of the Objective Fluorometer for Liquids 37

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYEROV, O. Ye.

USSR/Medicine - Encephalitis Jan/Feb 49
Brain Diseases

"The Question of Forensic Psychiatric Evaluation in Cases of Tick-Borne Encephalitis," O. Ye. Freyerov, Sr Sci Collaborator, Cen Sci Res Inst of Forensic Psychiatry imeni Prof Serbskiy, 3½ pp

"Nevropatol i Psikhiat" Vol XVIII, No 1

Cites two examples of solutions of the problem of personal responsibility in cases of tick-borne encephalitis by Inst of Forensic Psychiatry. They are in conformity with Art II of Penal Code RSFSR establishing criteria based on diagnosis of

14957

USSR/Medicine - Encephalitis Jan/Feb 49
(Contd)

destructive tendencies of the disease, degree of mental disturbance, presence of psychotic symptoms, loss of will power, etc. Dir, Cen Sci Res Inst of Forensic Psychiatry: Docent Ts. M. Feynberg. Sci Dir: Prof M. O. Gurevitz, Active Mem, Acad Med Sci.

14957

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

1. FREYEROV, O. YE.

2. USSR (600)

4. Psychology, Pathological

7. Clinical nature of the principles of delimiting psychopathy; discussion on Prof. O. V. Kerbikov's article "Certain controversial problems in psychiatry." Zhur. nevr. i psikh. No. 12 - 1952.

9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYEROV, O.Ye. (Moscow).

I.F. Merzheevskii's materialistic views on the nature of congenital feeble-mindedness. Zhur.nevr.i psikh. 53 no.6:407-410 Je '53. (MLRA 6:6)
(Feeble-minded)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYYEROV, O.Ye.

Dynamics of oligophrenia. Zhur.nevr.i psikh. 54 no.2:143-148 F '54. (MLRA 7:3)

1. Institut sudebnoy psikhiatrii im. V.P.Serbskogo.
(Inefficiency, Intellectual)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYYEROV, O.Ye.

Pathophysiological mechanisms of oligophrenia. Zhur.vys. nerv. deiat. 6 no.6:812-821 N-D '56. (MLRA 10:2)

1. TSentral'nyy nauchno-issledovatel'skiy institut sudebnoy psikhiatrii imeni Prof. Serbskogo.

(MENTAL DEFICIENCY, physiol.
synaptic funct., inhib., transmission rate & interrelation of a signal systems)
(CENTRAL NERVOUS SYSTEM, physiol. in various dis.
synaptic funct., inhib., transmission rate & interrelation of system in oligophrenia)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYYEKOV, O. Ye.

FREYYEROV, O.Ye.

Psychoses in oligophrenia. Zhur.nevr. i psikh. Supplement:76-77 '57. (MIRA 11:1)

1. TSentral'nyy nauchno-issledovatel'skiy institut sudebnoy psikhiatrii imeni V.P.Serbskogo (dir. - prof. A.N.Buneyev), Moskva.
(PSYCHOSES) (MENTAL DEFICIENCY)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYYEROV, O.Ye., starshiy nauchnyy sotrudnik

Legal psychiatric testimony on legal capacity in oligophrenia.
Probl.sud.psikh. 7:97-107 '57. (MIRA 10:11)
(CAPACITY AND DISABILITY)
(PSYCHOLOGY, FORENSIC)
(MENTALLY HANDICAPPED)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYYEROV, O.YE.

FREYYEROV, O.Ye., starshiy nauchnyy sotrudnik

Clinical variants of oligophrenia in the practice of forensic psychiatry. Probl.sud.psikh. 7:175-206 '57. (MIRA 10:11)
(MENTAL DEFICIENCY)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYYEROV, O.Ye.

Reactive conditions in oligophrenic patients. Probl.sud.psikh. 8:243-260 '59. (MIRA 13:6)
(Mental deficiency)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYYEROV, O.Ye.

Erroneous diagnosis of pathological effect. Prak.sudebnopsikh. ekspert. no.4:17-24 '61. (MIRA 16:2)

(EMOTIONS)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

PEREL'MAN, A.A. (Tomsk); FREYYEROV, O.Ya. (Moskva); SHPAK, V.M. (Kalinin); TORUBAROV, S.V. (Moskva); DETENGOF, F.F.

Discussion. Probl.sud.psikh. 9:230-235 '61. (MIRA 15:2)
(NEUROSES) (MENTAL ILLNESS) (INSANE, CRIMINAL AND DANGEROUS)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYYEROV, O.Ye.

Clinical variations of the dynamics of psychopathy. Prob.sud. psikh. 10:187-200'61. (MIRA 16:7)
(PSYCHOLOGY, PATHOLOGICAL)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYYEROV, O.Ye.

Classification of psychopathia. Sud.-med. ekspert. 4 no.4:45-49 O-D '61. (MIRA 14:12)

1. TSentral'nyy nauchno-issledovatel'skiy institut sudebnoy psikhiatrii imeni prof. V.P.Serbskogo (dir. - dotsent G.V.Morozov).
(PSYCHOLOGY, PATHOLOGICAL)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

LEBEDINSKAYA, Ye.I.; FEYGENBERG, I.M.; FREYYEROV, O.Ye.

Generalized orientation reactions in the defective stage of schizophrenia. Zhur. nevr. i psikh. 62 no.1:90-98 '62. (MIRA 15:4)

1. TSentral'nyy nauchno-issledovatel'skiy institut sudebnoy psikhiatrii imeni Serbskogo (dir. - dotsent G.V.Morozov) i kafedra fiziologii vysshey nervnoy deyatel'nosti cheloveka i zhivotnykh (zav. - prof. L.G.Voronin) Moskovskogo gosudarstvennogo universiteta.
(SCHIZOPHRENIA) (ORIENTATION)
(ELECTROENCEPHALOGRAPHY)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYYEROV, O.Ye.

Explosive variation of pseudopsychopathic defective states in schizophrenia. Probl. sud. psikh. no.13:194-207 '62. (MIRA 18:9)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYYEROV, O.Ye.

Impulsive desires in oligophrenias. Prak.sudebnopsikh.ekspert. (MIRA 16:2)
no.7:63-69 '62.
(FORENSIC PSYCHIATRY) (IMPULSE) (MENTAL DEFICIENCY)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYYEROV, O.Ye.

Apprehension disorders in spychopathies. Probl. obshchei i sud. psikh. no.14:136-148 '63. (MIRA 18:9)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYYEROV, O.Ye.; IVANITSKIY, A.M.

Results of a clinicophysiological study of effective pain disorders in oligophrenia. Zhur. nevr. i psikh. 64 no.10: 1539-1546 '64. (MIRA 17:11)

1. TSentral'nyy nauchno-issledovatel'skiy institut sudebnoy psikhiatrii im. Serbskogo (direktor - dotsent G.V. Morozov), Moskva.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREYYEROV, O.Ye.

Problem of mental capacity and incapacity in psychopathies. Sud.-med. ekspert. 8 no.2:27-32 Ap-Je '65. (MIRA 18:8)

1. TSentral'nyy nauchno-issledovatel'skiy institut sudebnoy psikhiatrii imeni Serbskogo (dir.- dotsent G.V. Morozov), Moskva.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6"

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L 1306-66 EWT(l)/EPA(s)-2/EWT(m)/EPF(c)/EWP(t)/EWP(b) IJP(c) JD/GG
ACCESSION NR: AP5012567 UR/0181/65/007/005/1517/1518

AUTHOR: Dantsiger, A. Ya.; Freyzon, I. A. 44,55

TITLE: Ferroelectric properties of solid solutions of the system KNO_3-KI 44,55

SOURCE: Fizika tverdogo tela, v. 7, no. 5, 1965, 1517-1518 44,55,61

TOPIC TAGS: ferroelectric effect, electric hysteresis, potassium compound, solid solution, electric polarization

ABSTRACT: The work reported is part of the investigation of the effect of different additives on the ferroelectric properties of potassium nitrate, which was investigated by an already-described procedure (FTT v. 7, no. 7, 1965) used to study the properties of solid solutions $Rb_xK_{1-x}NO_3$. Hysteresis loops of the melts of the investigated solid solutions, cooled in a nickel crucible, were obtained oscillographically and plots of spontaneous polarization against the temperature were plotted from the hysteresis loops. The results have established that introduction of KI additives stabilizes the ferroelectric phase III of KNO_3, which extends in this case to room temperatures. The magnitude of the spontaneous polarization decreases as compared with the pure KNO_3. In addition, the KI decreases somewhat the temperature of the I → III transition. Orig. art. has: 2 figures.

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

L 1306-66
ACCESSION NR: AP5012567

3

ASSOCIATION: Rostovskiy-na-Donu gosudarstvennyy universitet (Rostov-on-Don State University)

SUBMITTED: 21Nov64 ENCL: 00 SUB CODE: GS, EM

NR REF SOV: 002 OTHER: 001

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

L 6942-66 EWT(m)/EWP(t)/EWP(b) IJP(c) JD

ACC NR: AP5017318 SOURCE CODE: UR/0181/65/007/007/2190/2194

45

B

AUTHOR: Dantsiger, A. Ya.; Freyzon, I. A.

ORG: Rostov-na-Donu State University (Rostovskiy-na-Donu gosudarstvennyy universitet)

TITLE: Ferroelectric properties of $Rb_xK_{1-x}NO_3$ solid solutions

SOURCE: Fizika tverdogo tela, v. 7, no. 7, 1965, 2190-2194

TOPIC TAGS: ferroelectric property, solid solution, Curie point, rubidium compound, hysteresis loop, potassium compound, nitrate

ABSTRACT: By means of oscillograph studies done on cooled solid solutions, a ferroelectric region was mapped on the phase diagram for systems of the $Rb_xK_{1-x}NO_3$ type. The influence of additions of RbNO to KNO on the Curie temperature (T_k), the spontaneous polarization (R_{sp}) and on the width of ferroelectric region of the phase diagram were studied. Causes of the lowering of T_k and R_{sp} were also considered. Solid solutions of the $Rb_xK_{1-x}NO_3$ type were melted and cooled (2°C/min) in a specially constructed Ni crucible; *R-E* measurements (dielectric hysteresis) were made during the cooling. A schematic diagram of the crucible and of the experimental arrangements is given. From oscillographic measurements, a phase diagram (to 50 mol %) is drawn, mapping the region exhibiting dielectric hysteresis. This region is designated as

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III in fig. 1. Data are given for R_{sp} as a function of temperature for varying mol contents of $RbNO_3$ (0-50%); maxima from this curve are plotted along with the values for the coercive fields (E_k) as a function of content of $RbNO_3$. R_{sp} drops sharply up to about 20 mol %, after which the drop becomes more gradual; E_k increases linearly with a small slope, up to 30 mol %. Photographs are shown of the dielectric hysteresis loops, and these indicate a decrease in saturation with rise in content of $RbNO_3$. A theoretical basis is postulated for the phenomena. The lowering of T_k and R_{sp} is analyzed on the basis of cationic and anionic displacement. The atomic radii of K^+ and Rb^+ are compared, and the size difference influences the internal field. The phase transition I to III appears similar to the order-disorder type transformation. The role of the internal field appears as an ordering displacement of the NO_3 groups, thereby lowering the internal field necessary to bring about a lower degree of order and, therefore, lowering T_k and R_{sp}. Orig. art. has: 6 figures.

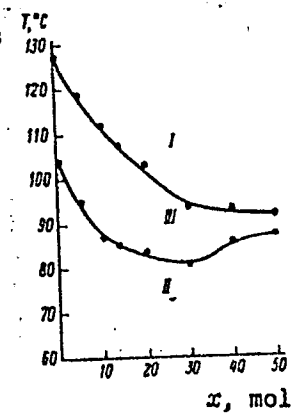

Fig. 1. Phase diagram of the system $Rb_xK_{1-x}NO_3$ (for cooling).

SUB CODE: SS,EM/ SUBM DATE: 05Nov64/ ORIG REF: 002/ OTH REF: 006

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CA FREZE, A.N. 12

Detection of glass fragments in food products. A. N. Freze. *Gigiena i Sanit.* **1952**, No. 4, 49–50. Large pieces are found by sieving. For small fragments the specimen is suspended in $CHCl_3$ and allowed to rise with gentle shaking. The lower portion is then run off through a filter, the residue is washed with 10% HCl and H_2O, dried, treated with 1% phenolphthalein soln. in EtOH and gently ground directly with the filter paper. The grinding noise and the development of red spots indicate the glass particles.

G. M. Kosolapoff

Chimkent Oblast' Sanitary - Bacteriological Lab.

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREZE, A. N.

Iron glazes for ceramics for facades. Sbor. nauch. trud. NII po stroi. ASiA no.1:87-90 '61. (MIRA 16:1)

(Glazes) (Ceramics)

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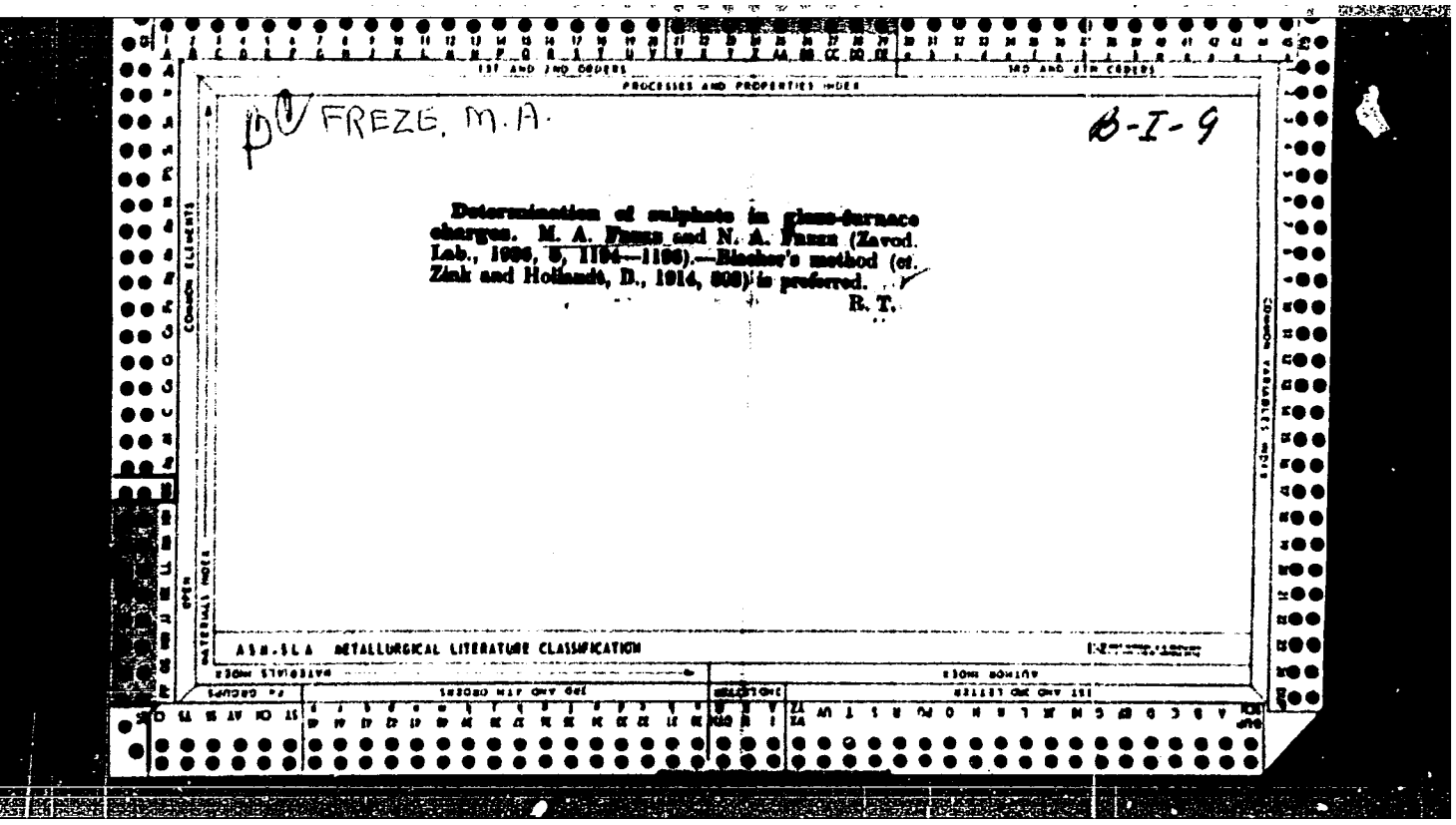

FREZE, M. A.

B-I-9

Determination of sulphate in glass-furnace charges. M. A. Frezz and N. A. Frezz (Zavod. Lab., 1936, 5, 1184—1186).—Blacher's method (cf. Zink and Hollandt, D., 1914, 808) is preferred.

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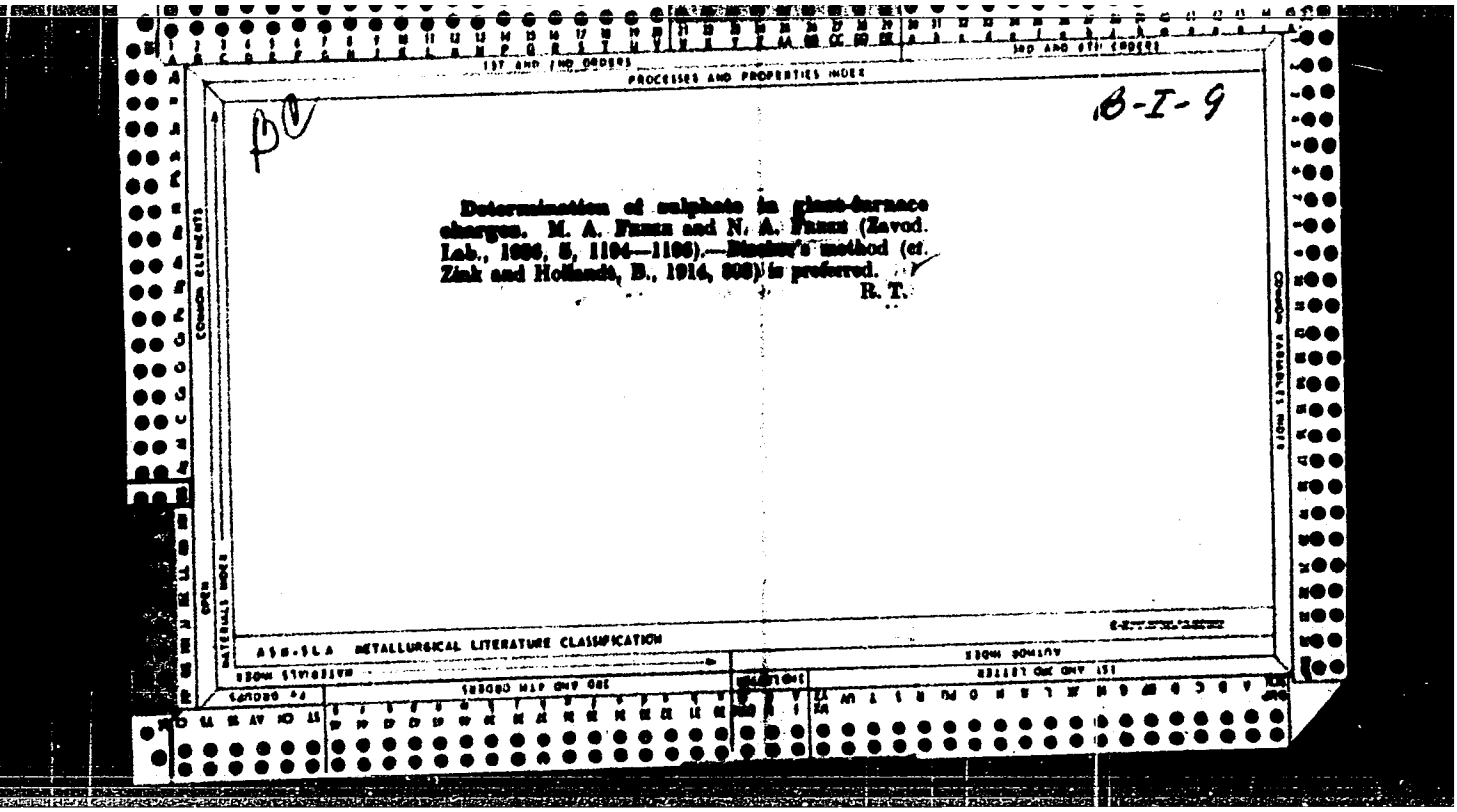

PROCESSES AND PROPERTIES INDEX

B-I-9

Determination of sulphate in giant-furnace charges. M. A. Fanss and N. A. Fanss (Zavod. Lab., 1936, 5, 1104—1106).—Blasdale's method (cf. Zink and Hollandt, B., 1914, 808) is preferred.

R. T.

ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION

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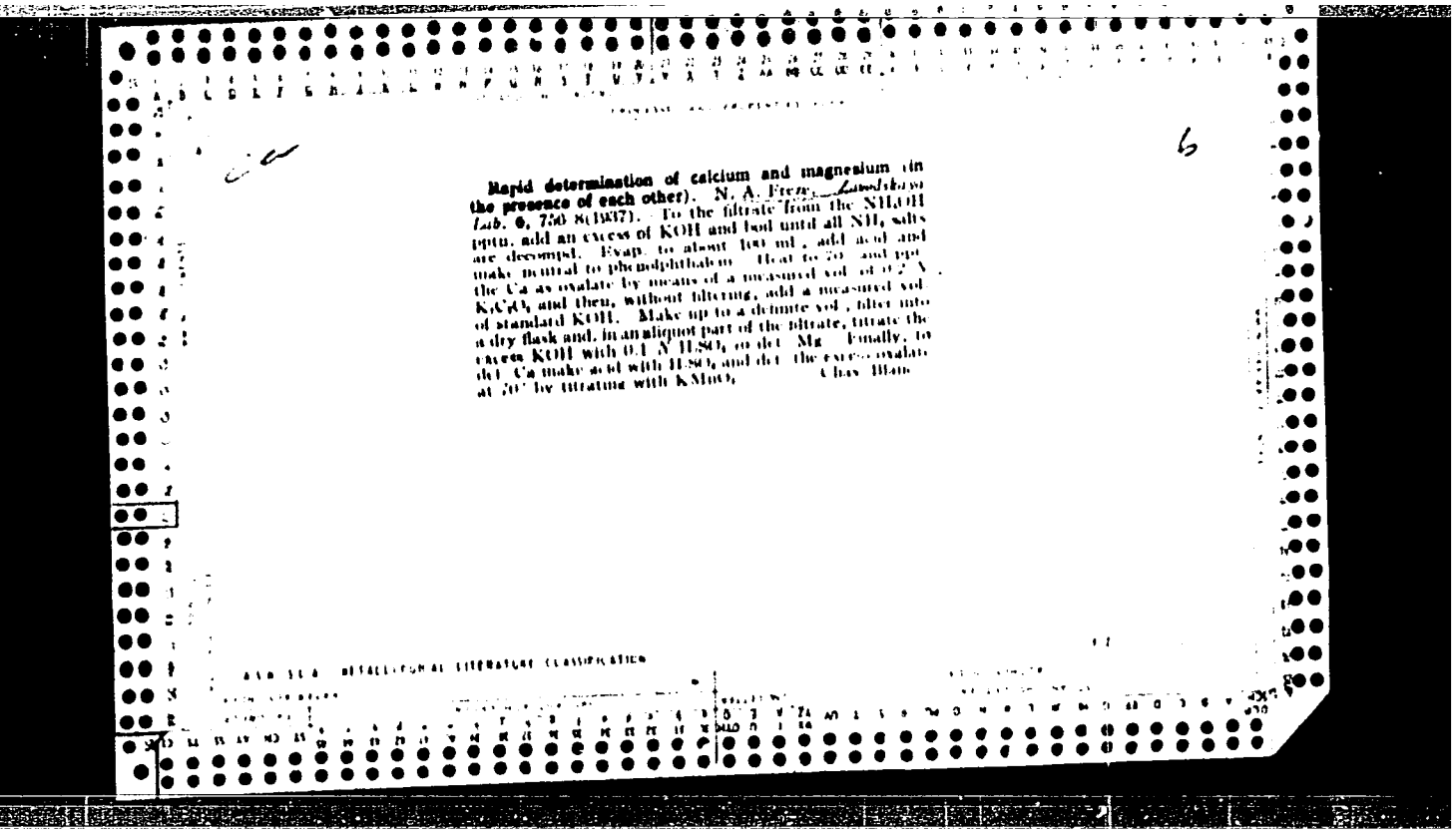

Rapid determination of calcium and magnesium (in the presence of each other). N. A. Frey. *Landbouw Lab.* **6**, 750–8(1937). To the filtrate from the NH_4OH ppts. add an excess of KOH and boil until all NH_3 salts are decompd. Evap. to about 100 ml., add acid and make neutral to phenolphthalein. Heat to 70° and ppt. the Ca as oxalate by means of a measured vol. of 0.2 N $K_2C_2O_4$ and then, without filtering, add a measured vol. of standard KOH. Make up to a definite vol., filter into a dry flask and, in an aliquot part of the filtrate, titrate the excess KOH with 0.1 N H_2SO_4, to det. Mg. Finally, to det. Ca make acid with H_2SO_4 and det. the excess oxalate at 70° by titrating with $KMnO_4$. Chas. Blanc

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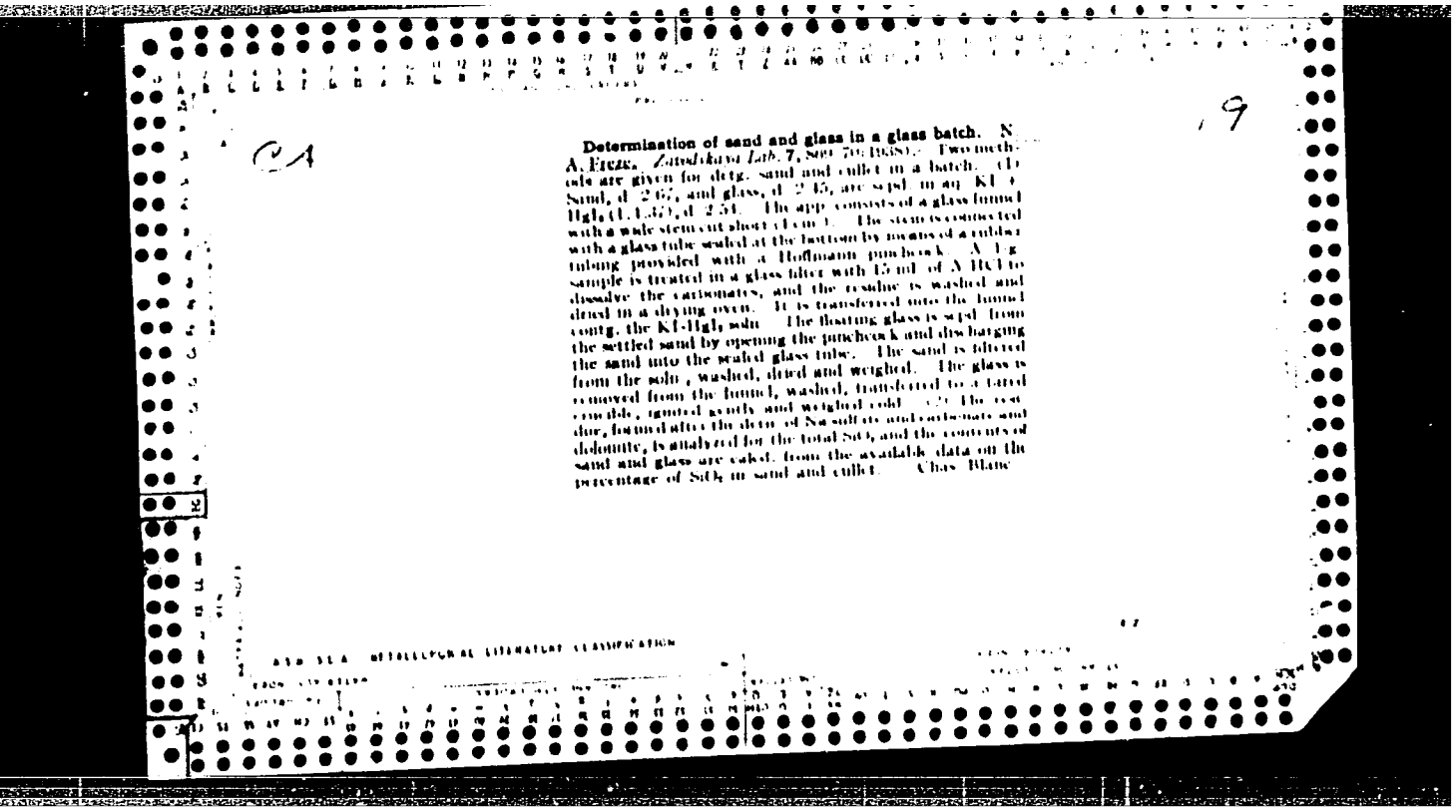

Determination of sand and glass in a glass batch. N. A. Freze. *Zavodskaya Lab.* 7, 869-70 (1938).—Two methods are given for detg. sand and cullet in a batch. (1) Sand, d. 2.67, and glass, d. 2.45, are sepd. in aq. KI + HgI_2 (1.1.37), d. 2.54. The app. consists of a glass funnel with a wide stem cut short (1 cm.). The stem is connected with a glass tube sealed at the bottom by means of a rubber tubing provided with a Hoffmann pinchcock. A 1-g. sample is treated in a glass filter with 15 ml. of N HCl to dissolve the carbonates, and the residue is washed and dried in a drying oven. It is transferred into the funnel contg. the KI-HgI_2 soln. The floating glass is sepd. from the settled sand by opening the pinchcock and discharging the sand into the sealed glass tube. The sand is filtered from the soln., washed, dried and weighed. The glass is removed from the funnel, washed, transferred to a tared crucible, ignited gently and weighed cold. (2) The residue, formed after the detn. of Na sulfate and carbonate and dolomite, is analyzed for the total SiO_2 and the contents of sand and glass are calcd. from the available data on the percentage of SiO_2 in sand and cullet. Chas. Blanc

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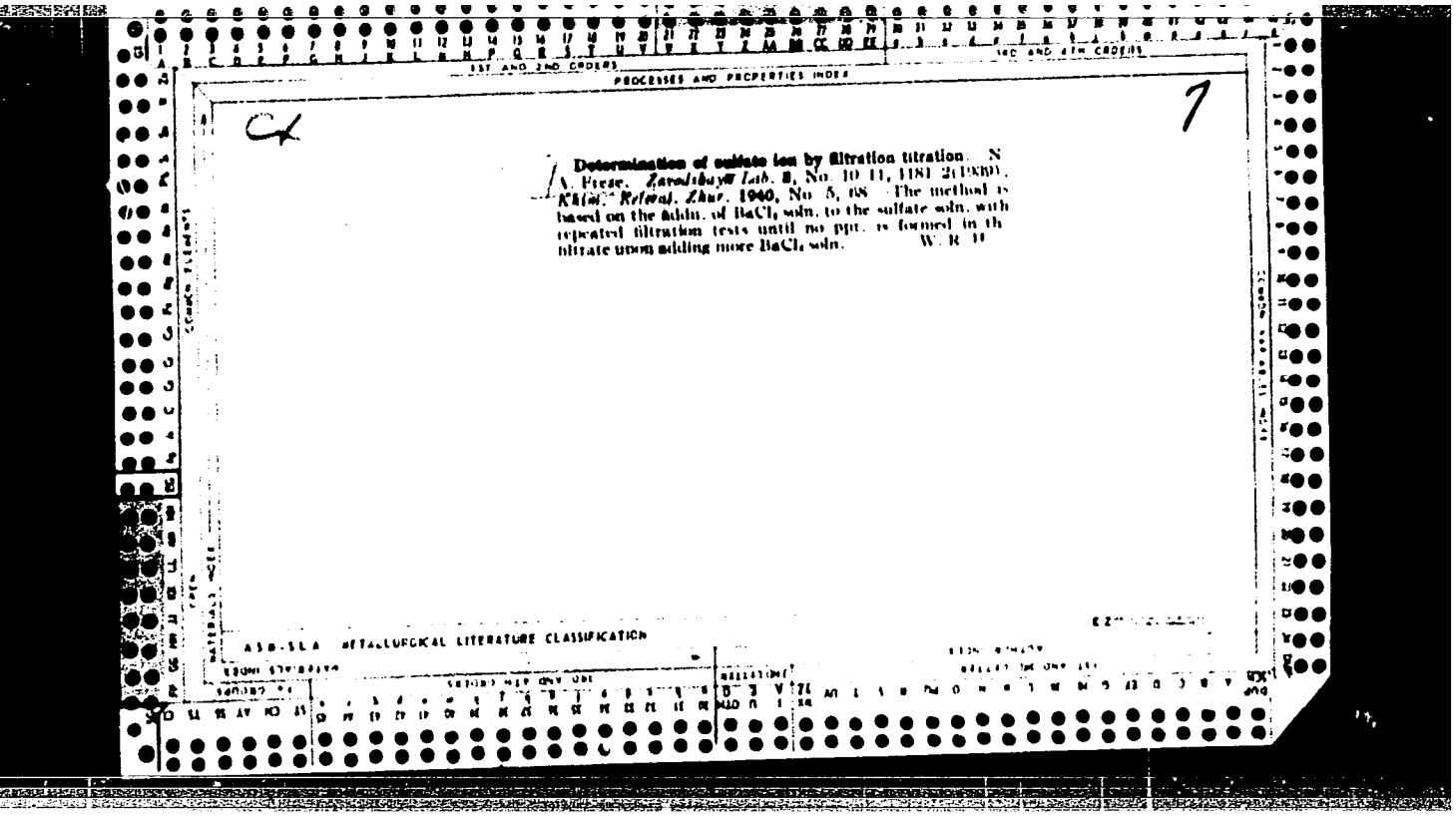

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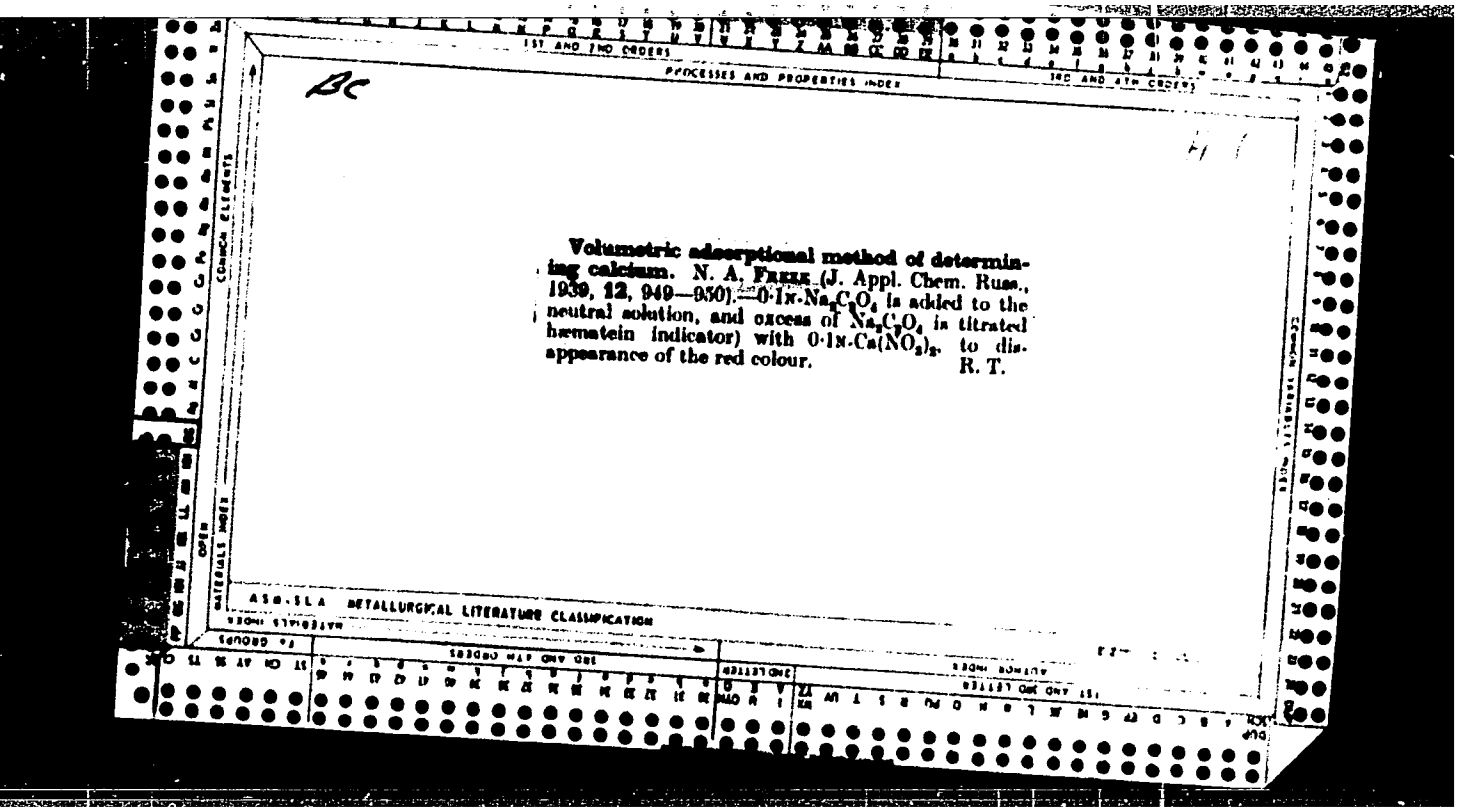

Volumetric adsorptional method of determining calcium. N. A. FREEE (J. Appl. Chem. Russ., 1939, **12**, 949—950).—0·1N-$Na_2C_2O_4$ is added to the neutral solution, and excess of $Na_2C_2O_4$ is titrated (hæmatein indicator) with 0·1N-$Ca(NO_3)_2$ to disappearance of the red colour. R. T.

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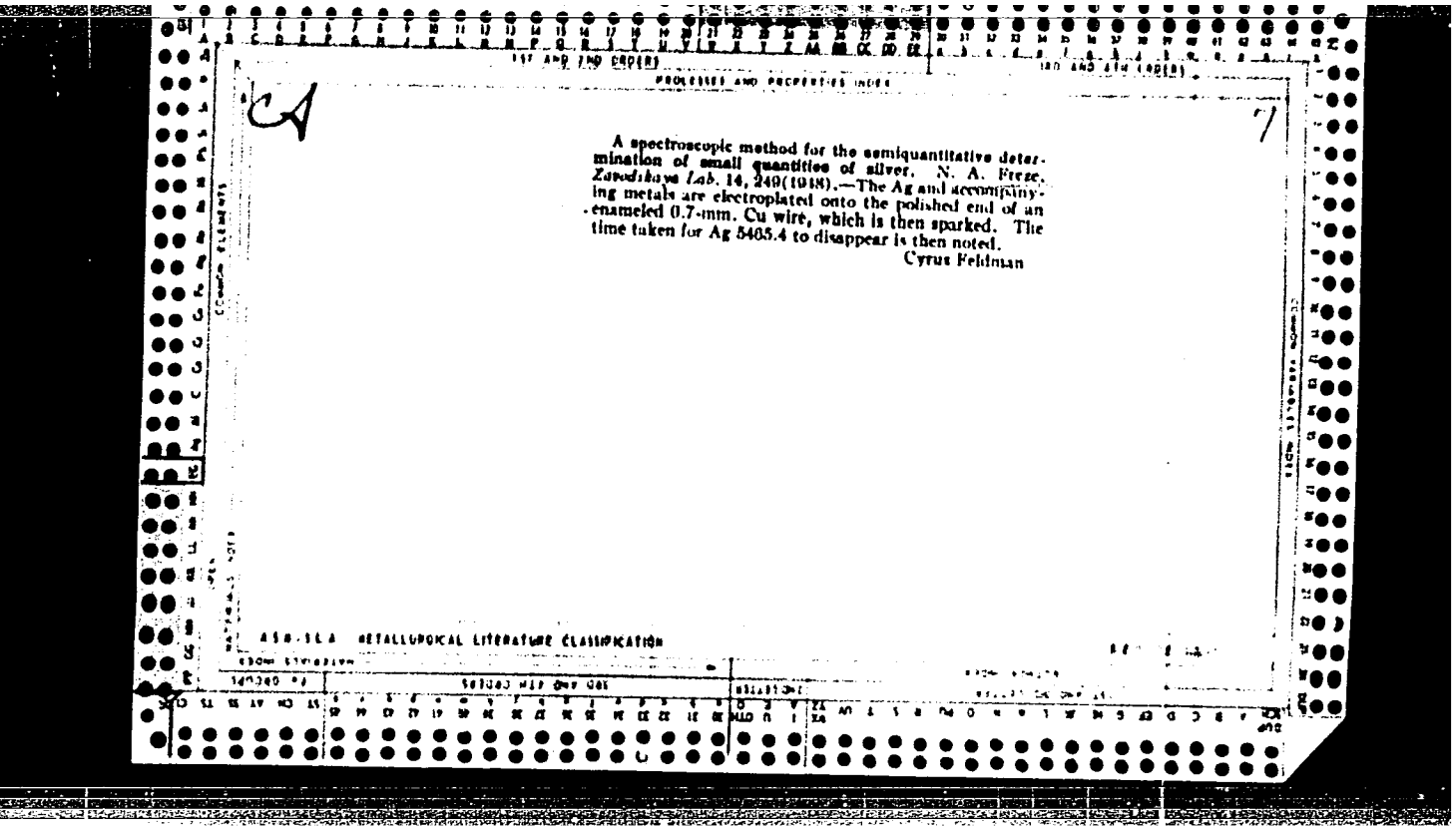

A spectroscopic method for the semiquantitative determination of small quantities of silver. N. A. Frese. *Zavodskaya Lab.* 14, 249(1948).—The Ag and accompanying metals are electroplated onto the polished end of an enameled 0.7-mm. Cu wire, which is then sparked. The time taken for Ag 5465.4 to disappear is then noted.

Cyrus Feldman

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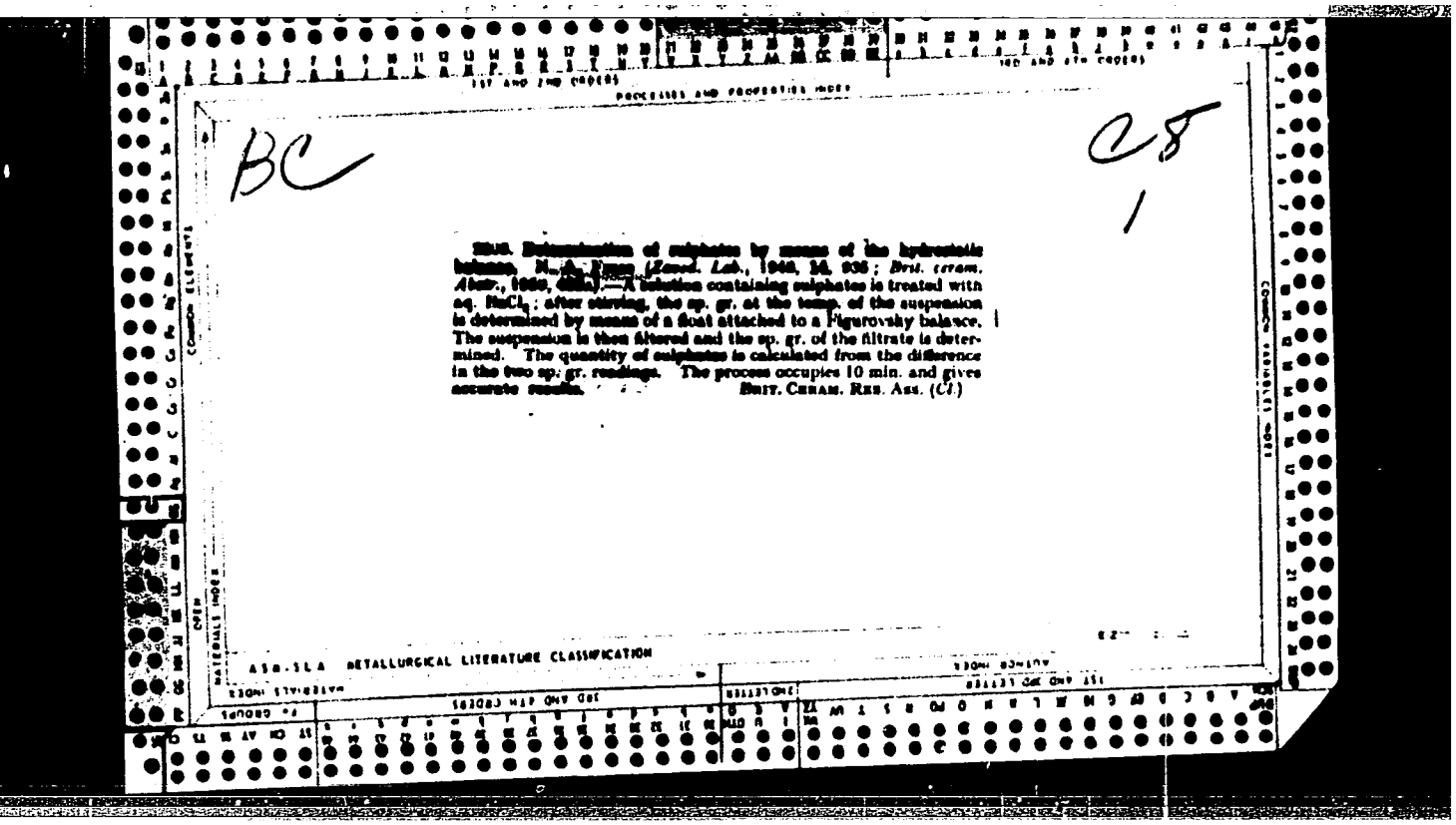

1ST AND 2ND ORDERS

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3RD AND 4TH ORDERS

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[illegible]. Determination of sulphates by means of the hydrostatic balance. N. A. Fraser (*Zavod. Lab.*, 1948, 14, 935; *Brit. ceram. Abstr.*, 1950, [illegible]).—A solution containing sulphates is treated with aq. $BaCl_2$; after stirring, the sp. gr. at the temp. of the suspension is determined by means of a float attached to a Figurovsky balance. The suspension is then filtered and the sp. gr. of the filtrate is determined. The quantity of sulphates is calculated from the difference in the two sp. gr. readings. The process occupies 10 min. and gives accurate results. BRIT. CERAM. RES. ASS. (*Cl.*)

COMMON ELEMENTS

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2ND LETTER

1ST AND 2ND LETTER

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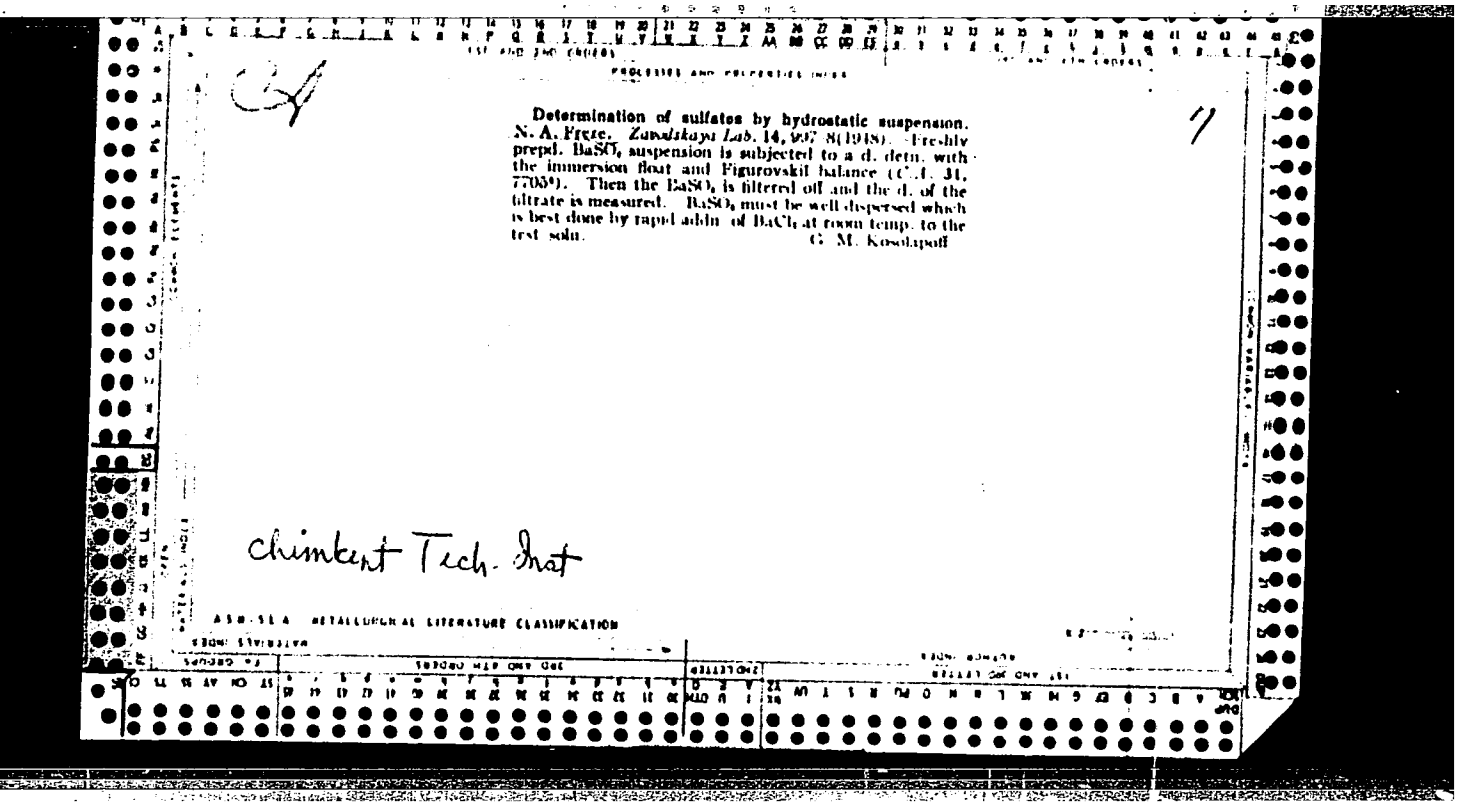

Determination of sulfates by hydrostatic suspension. N. A. Frese. *Zavodskaya Lab.* 14, 907-8(1948). Freshly prepd. $BaSO_4$ suspension is subjected to a d. detn. with the immersion float and Figurovskil balance (C.A. 31, 7705⁹). Then the $BaSO_4$ is filtered off and the d. of the filtrate is measured. $BaSO_4$ must be well dispersed which is best done by rapid addn. of $BaCl_2$ at room temp. to the test soln.
G. M. Kosolapoff

chimkent Tech. Inst

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

KEVESHCH, P.D., kand.tekhn.nauk; POLYAKOV, G.Ya., inzh.; FREZE, S.P., inzh., red.; MAKRIDOV, Ye.V.; MOSLIN, G.D., tekhn.red.

[Nonautoclaved gas concrete made with perhydrol] Bezavtoklavnyi gazobeton na pergidrole; opyt stroitel'stva Kuibyshevskoi GES. Kuybyshev, Orgenergostroi,1958. 14 p. (MIRA 12:3)
(Lightweight concrete) (Hydrogen peroxide)

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SPASSKIY, A.A.; FREZE, V.I.; BOGOYAVLENSKIY, Yu.K.; ROYTMAN, V.A.

Work of the Kamchatka Helminthological Expedition (317th Helminthological Expedition) in 1960. Trudy Gel'm. lab. 12:201-221 '62. (MIRA 15:7)

(Kamchatka--Worms, Intestinal and parasitic)

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FREZE, Vadim Ivanovich; SKRYABIN, K.I., akademik; ROYTMAN, V.A., red.

[Principles of cestodology] Osnovy tsestidologii. Pod red. K.I.Skriabina. Moskva, Nauka. Vol.5. 1965. 538 p. (MIRA 18:7)

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FREZE, V.I.

Ontogenetic stages and developmental cycles of Proteocephalata (Cestoda). Trudy Gel'm. lab. 15:185-195 '65 (MIRA 19:1)

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ROSNER, Julian.; FRENZER, Olga.; KOZLOWSKA, Janina.

Occupational skin diseases among metallurgic industry workers with special reference to eczematous lesions. Polski tygod. lek. 12 no.17: 621-626 22 Apr 1957.

1. Z Osrodka Chorob Zawodowych Kliniki Dermatologicznej A. M. w Poznaniu i z Przychodni Dermatologicznej Panstwowych Zakladow Przemysylu Metalowego H. Cegielski w Poznaniu. Poznan, Klin. Dermatol. Osrodek Chor. Zawod.

(DERMATITIS, CONTACT, etiol. & pathogen. in metallurgy workers (Pol))

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BURDA, Adam; FREZER, Olga; NOWAK, Zdzislaw

Modern methods for the treatment of psoriasis. Przegl.derm., Warsz.46 no.3:289-299 My-Je '59.

1. Z Kliniki Dermatologicznej A.M. w Poznaniu. Kierownik: prof. dr. A. Straszynski.
(PSORIASIS ther.)

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ROSNER, Julian; FREZER, Olga

8 years of roentgenotherapy of malignant neoplasms of the skin in the dermatological clinic of the Academy of Medicine in Poznan. Przegl.derm. Warsz. 47 no.5:357-376 S-O '60.

1. Z Kliniki Dermatologicznej A.M. w Poznaniu Kierownik: prof. dr A.Straszynski.
(SKIN NEOPLASMS radiogr)

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VEDMIDSKIY, A.M., kandidat tekhnicheskikh nauk; EREZEROV, G.R., professor, redaktor; YASINSKIY, G.I., kandidat tekhnicheskikh nauk, retsenzent.

[Technology of manufacturing measuring instruments] Tekhnologiia proizvodstva izmeritel'nykh priborov. Izd. 2-e, perer. i dop. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit.lit-ry. Pt.1.1955. 386 p. (MIRA 9:4)

(Measuring instruments)

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ROYTMAN, V.A.; FREZE, V.I.

New species of the genus Gangesia (Cestoda, Proteocephalata) from fishes of the Amur basin. Trudy Gel'm. lab. 14:170-181 '64.
(MIRA 17:10)

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BARSOV, Aleksandr Il'ich, inzhener; FREZEROV, G.R., professor, retsenzent; BELOSTOTSKIY, L.Ya., redaktor; SHERSHURINA, Ye.A., redaktor izdatel'stva; UVAROVA, A.F., tekhnicheskiy redaktor

[Technology of cutting tools] Tekhnologiia reshushchego instrumenta. Izd. 2-oe. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1957. 348 p. (MLRA 10:8)
(Cutting tools)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

FREZEROV, G. K., Professor

"The First Russian Toolmakers" (Historical)

in Recent Developments in Design of Metal-cutting Tools, Moscow, Mashgiz, 1958, pp. 229

In this collection of articles results are presented of investigations carried out at the chair of "Tool Making" of the Moscow Machine Tool and Tool Making Inst. im I. V. Stalin.

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KOTEL'NIKOV, V.K.; KHRISTOFOROV, D.G.; FREZEROV, G.V., prof., retsenzent; KRUGLYAK, L.A., inzh., red.; SEMENCHENKO, V.A., red.izd-va; MAKAROVA, L.A., tekhn. red.

[Attachments for the manufacture of metal-cutting tools] Prisposobleniia dlia proizvodstva rezhushchikh instrumentov. Moskva, Mashgiz, 1963. 189 p. (MIRA 17:3)

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FREZIK, J.

Associative connections established by Purkinje axon collaterals between different parts of the cerebellar cortex. Acta morph. acad. sci. hung. 12 no.1:9-13 '63.

1. Department of Anatomy, University Medical School, Pecs (Director: Prof. J. Szentagothai).
(CEREBRAL CORTEX) (NEURONS) (ANATOMY)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000513710008-6

BOCHAROV, Yu., arkhitektor; [illegible], arkhitektor; [illegible], arkhitektor

Development of the city structure in the group form of settlement. Eksper. proekt. no.5:88-96 '62. (MIRA 18:9)

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MIKHAYLOV, Ye.D.; FREZINSKAYA, N.R.

Bibliography. Vop. geog. no.66:205-216 '65.
(MIRA 18:6)

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ACC NR: AP6020951 SOURCE CODE: UR/0054/66/000/002/0066/0070

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B

AUTHOR: Frezinskiy, B. Ya.

ORG: none

TITLE: Theoretical investigation of F' color centers in oxide crystals of bivalent metals

SOURCE: Leningrad. Universitet. Vestnik. Seriya fiziki i khimii, no. 2, 1966, 66-70

TOPIC TAGS: alkali earth crystal, color center, crystal lattice, wave function, F band

ABSTRACT: The Pick model of the F' -center for alkali earth crystals has been examined. Calculation of energy of the ground and first excited states of F'-centers in MgO, BaO, and CaO has been made in approximation of the rigid-point ion lattice. The test wave functions have been taken as symmetrical combinations of

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the F' -center approximative functions. The calculated values of transition energy of the F' -center are in good agreement with the available experimental data for frequencies in the maximum of the F' -band and therefore confirm the Pick model of the F' -center for alkali earth crystals. The author thanks M. I. Petrashen' for suggesting the subject and interest in the work, and I. V. Abarenkov for his constant and close supervision of the thesis. Orig. art. has: 10 formulas and 2 tables. [Based on author' s abstract] [NT]

SUB CODE: 20/ SUBM DATE: 01Jul65/ ORIG REF: 002/ OTH REF: 007/

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